

Ontario Influenza Bulletin 2005-2006 Season

SURVEILLANCE WEEK 14 (April 2 - 8), 2006

This issue of the Ontario Influenza Bulletin provides information on the surveillance period from April 2- 8, 2006. The analysis for this issue occurred on Wednesday April 12, 2006, therefore all data is current to that date.

During week 14 of 2006, influenza activity in Ontario was slightly lower compared to that of the previous week. Sixty eight sporadically occurring cases of influenza (50 influenza A, 11 influenza B and 7 unspecified) were reported through iPHIS. In addition, there were 5 institutional outbreaks (3 influenza A and 2 influenza B) reported. The highest level of influenza activity in Ontario was 'widespread activity' reported from Toronto, although 5 individual health units from other regions also reported 'widespread activity'. Overall 'localized activity' were reported from Eastern, Central East, Central West, North West and Southwest regions. Only North East region reported 'sporadic activity'.

When entering laboratory-confirmed influenza cases in iPHIS, please enter the "type" (i.e. A vs. B) of influenza, using the sub-type dropdown menu. If the sub-type is not known, please enter either "Influenza A - Not sub-typed" or "Influenza B" rather than leaving the field blank. Leaving the field blank results in the classification of your case as "unspecified". Additionally, when running Cognos reports by sub-type, if ALL influenza "sub-types" are selected in a prompt, cases with this field blank in iPHIS will not be returned (i.e. will not appear in the report). Your attention to this matter is most appreciated.

For a definition of influenza-like illness (ILI) activity levels and links to websites providing current influenza information from other sources, please refer to the attached Appendix. If you would like to provide feedback on the Bulletin, please contact Shafiq Chowdhury (shafiq.chowdhury@moh.gov.on.ca, 416-327-7807) or Anne-Luise Winter (anne-luise.winter@moh.gov.on.ca, 416-327-7301).

Table 1: Summary of laboratory-confirmed influenza cases and institutional influenza outbreaks, by health region, April 2 - 8, 2006.

Lab-confirmed Influenza cases*	HEALTH REGION							TOTAL
	North West	North East	Eastern	Central East	Toronto	South West	Central West	
Influenza A	0	0	16	3	16	2	13	50
Influenza B	0	1	1	1	3	2	3	11
Influenza A & B	0	0	0	0	0	0	0	0
Unspecified †	0	3	1	0	1	1	1	7
Total new cases	0	4	18	4	20	5	17	68
Institutional influenza outbreaks‡	0	0	0	1	0	2	2	5

SOURCE: MOHLTC (iPHIS, Health Unit Reports to PHD, Provincial Appendix D and Appendix E Database)

* Includes reports of sporadically occurring influenza through iPHIS, as well as cases in institutional outbreaks, with dates of onset in the surveillance period.

† Type of influenza, i.e. A vs B, was not specified in iPHIS (i.e. Influenza subtype dropdown menu left blank or reported as "Unspecified")

‡ Laboratory-confirmed outbreaks in institutions during the surveillance period.

Table 2: Confirmed* cases of influenza by health unit & health region, with an episode date† between April 2- 8, 2006.

Region	Health Unit	Laboratory-Confirmed Influenza			TOTAL
		Influenza A	Influenza B	Unspecified‡	
North West	Northwestern	0	0	0	0
	Thunder Bay District	0	0	0	0
	TOTAL NORTH WEST	0	0	0	0
North East	Algoma	0	1	2	3
	North Bay Parry Sound District	0	0	0	0
	Porcupine	0	0	0	0
	Sudbury & District	0	0	1	1
	Timiskaming	0	0	0	0
	TOTAL NORTH EAST	0	1	3	4
Eastern	Eastern Ontario	0	0	0	0
	Hastings & Prince Edward Counties	0	0	0	0
	Kingston, Frontenac, Lennox & Addington	0	0	1	1
	Leeds, Grenville & Lanark	0	0	0	0
	Ottawa	16	1	0	17
	Renfrew	0	0	0	0
Central East	TOTAL EASTERN	16	1	1	18
	Durham Region	0	0	0	0
	Haliburton, Kawartha, Pine Ridge District	1	1	0	2
	Peterborough County-City	0	0	0	0
	Simcoe Muskoka District	0	0	0	0
	York Region	0	0	0	0
Toronto	Peel Region	2	0	0	2
	TOTAL CENTRAL EAST	3	1	0	4
	Toronto	16	3	1	20
	TOTAL TORONTO	16	3	1	20
South West	Grey-Bruce	0	0	0	0
	Elgin-St. Thomas	0	0	0	0
	Huron County	1	2	1	4
	Chatham-Kent	0	0	0	0
	Lambton	0	0	0	0
	Middlesex-London	1	0	0	1
Central West	Oxford	0	0	0	0
	Perth District	0	0	0	0
	Windsor-Essex County	0	0	0	0
	TOTAL SOUTHWEST	2	2	1	5
	Brant	0	0	0	0
	Haldimand-Norfolk	0	0	0	0
Central West	Hamilton	12	3	0	15
	Niagara Region	0	0	1	1
	Halton Region	0	0	0	0
	Waterloo Region	0	0	0	0
	Wellington-Dufferin-Guelph	1	0	0	1
	TOTAL CENTRAL WEST	13	3	1	17
TOTAL ONTARIO		50	11	7	68

SOURCE: MOHLTC (iPHIS, Health Unit Reports to PHD)

* Confirmed cases of influenza can include laboratory-confirmed cases and epi-linked cases.

† Episode Date for a case corresponds to the earliest date on record for the case according to the iPHIS hierarchy (Symptom Date > Clinical Diagnosis Date > Specimen Collection Date > Lab Test Date > Reported Date)

‡ Type of influenza, i.e. A vs B, was not specified in iPHIS (i.e. Influenza subtype dropdown menu left blank or reported as unspecified)

Table 3: Cumulative* confirmed† cases of influenza by health unit & health region, September 1, 2005 to April 8, 2006.

Region	Health Unit	Laboratory-Confirmed Influenza			TOTAL
		Influenza A	Influenza B	Unspecified‡	
North West	Northwestern	6	6	0	12
	Thunder Bay District	2	0	0	2
	TOTAL NORTH WEST	8	6	0	14
North East	Algoma	9	3	7	19
	North Bay Parry Sound District	1	3	10	14
	Porcupine	7	10	3	20
	Sudbury & District	4	12	1	17
	Timiskaming	0	0	0	0
	TOTAL NORTH EAST	21	28	21	70
Eastern	Eastern Ontario	3	0	0	3
	Hastings & Prince Edward Counties	17	16	0	33
	Kingston, Frontenac, Lennox & Addington	17	17	0	34
	Leeds, Grenville & Lanark	1	0	19	20
	Ottawa	64	6	7	77
	Renfrew	7	2	0	9
	TOTAL EASTERN	109	41	26	176
Central East	Durham Region	5	1	1	7
	Haliburton, Kawartha, Pine Ridge District	25	57	1	83
	Peterborough County-City	2	5	3	10
	Simcoe Muskoka District	22	36	18	76
	York Region	18	52	4	74
	Peel Region	34	62	9	105
	TOTAL CENTRAL EAST	106	213	36	355
Toronto	Toronto	194	190	2	386
	TOTAL TORONTO	194	190	2	386
South West	Grey-Bruce	20	28	2	50
	Elgin-St. Thomas	1	0	0	1
	Huron County	5	29	3	37
	Chatham-Kent	1	0	1	2
	Lambton	0	0	0	0
	Middlesex-London	24	17	4	45
	Oxford	4	15	4	23
	Perth District	1	19	1	21
	Windsor-Essex County	16	7	0	23
	TOTAL SOUTHWEST	72	115	15	202
Central West	Brant	0	0	1	1
	Haldimand-Norfolk	13	8	1	22
	Hamilton	83	89	0	172
	Niagara Region	4	26	5	35
	Halton Region	19	18	1	38
	Waterloo Region	21	38	10	69
	Wellington-Dufferin-Guelph	3	31	11	45
	TOTAL CENTRAL WEST	143	210	29	382
TOTAL ONTARIO		653	803	129	1585

SOURCE: MOHLTC [iPHIS, Health Unit Reports to PHD]

* Cumulative case counts include late reports and records that are otherwise reconciled. Therefore, cumulative counts may not equal new cases plus previous cumulative value.

† Confirmed cases of influenza can include laboratory-confirmed cases and epi-linked cases.

‡ Type of influenza, i.e. A vs B, was not specified in iPHIS (i.e. Influenza subtype dropdown menu left blank or reported as unspecified)

Influenza Subtype(s):

During Week 14, 3,188 isolates were received by the Public Health Agency of Canada, with a total of 415 and 185 testing positive for influenza A and B respectively. The majority of the influenza A isolates (228) were from Quebec (54.9%), Ontario 88 (21.2%), and Alberta 39 (9.4%). The majority of the influenza B isolates (64) were from Ontario (34.6%), New Brunswick 43 (23.2%) and Quebec 37 (20.0%).*

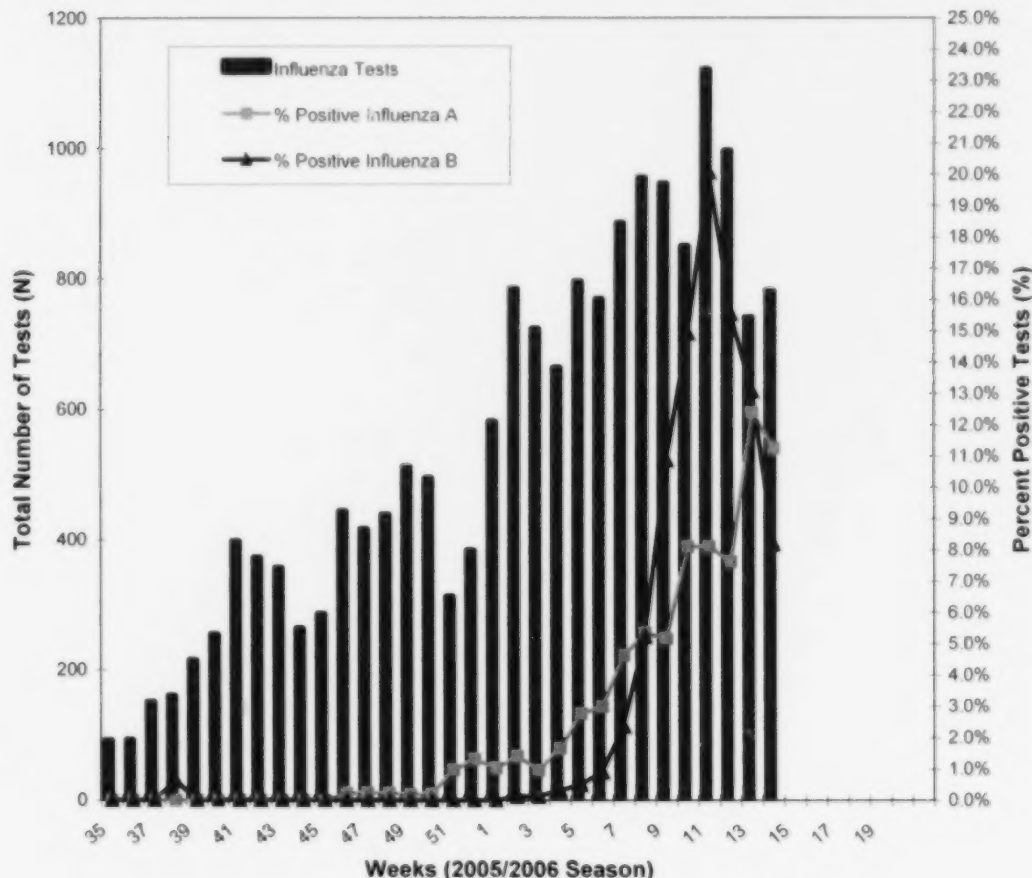
Since the start of the 2005-2006 influenza season, the National Microbiology Laboratory (NML) has antigenically characterized 668 influenza viruses. Since the end of February 2006, the vast majority of influenza B viruses characterized have been B/Malaysia/2506/2004-like, which is the WHO-recommended influenza B component for the Northern Hemisphere 2006-2007 influenza vaccine.**

Note: The 2005-2006 season Canadian vaccine contains an A/ New Caledonia/20/1999(H1N1)-like, an A/ California/7/2004(H3N2)-like, and a B/Shanghai/361/2002-like virus strain.

* These data have been obtained from the Respiratory Virus Detection table of Public Health Agency of Canada for week 14, 2006

** These data have been obtained from the FluWatch report of the Public Health Agency of Canada for week 13 (March 26 – April 1s) 2006

Figure 1: Total number of influenza tests performed and percent of positive tests in Ontario reported to the Centre for Infectious Disease Prevention and Control (CIDPC), by report week .



Source: Public Health Agency of Canada

* Total numbers reported include late reports; therefore totals may not be equal to the sum of the weekly numbers.

Note: Cumulative numbers for season to date are available through FluWatch: <http://www.phac-aspc.gc.ca/fluwatch/>

Table 4: Institutional respiratory outbreaks in Ontario, September 1, 2005 to April 8, 2006

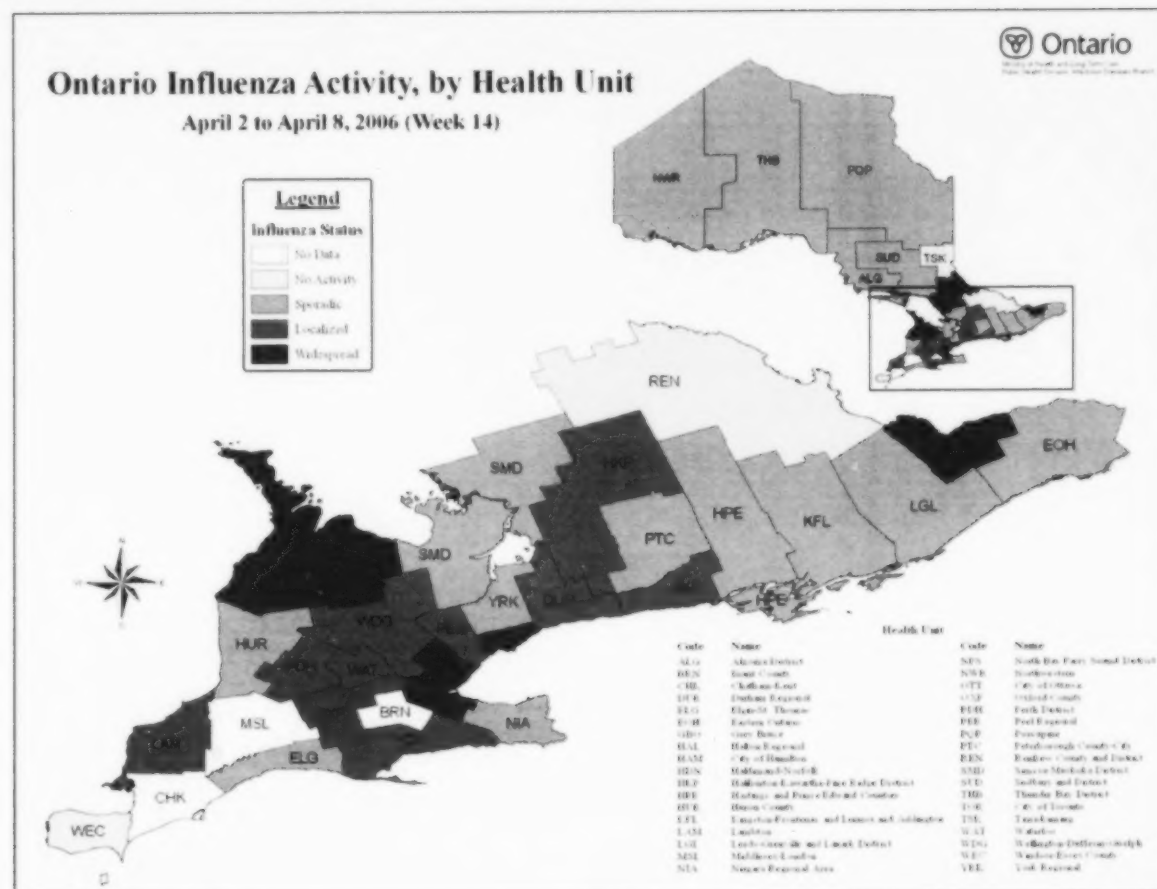
Institutional Respiratory Infection Outbreaks		
New Outbreaks*	N	% (of outbreaks)
Influenza A	3	23.1
Influenza B	2	15.4
Influenza A and B	0	0.0
Parainfluenza (All types)	0	0.0
Other organisms	0	0.0
No organism identified	8	61.5
TOTAL	13	100
Total Respiratory Infection Outbreaks, Season to Date**	N	% (of outbreaks)
Influenza A	87	14.7
Influenza B	16	2.7
Influenza A and B	1	0.2
Parainfluenza (All types)	43	7.3
Other organisms	83	14.0
No organism identified	363	61.1
TOTAL	593	100
Types of Institutions (All Outbreaks) **	N	% (of outbreaks)
Long-Term Care Homes	496	83.6
Hospitals	34	5.7
Retirement Homes	58	9.8
Other	5	0.9
TOTAL	593	100
Outbreak Related Complications (All Outbreaks) **	N	% (of cases)
Deaths		
Residents	178	2.6
Staff	0	0.0
Pneumonia (Chest x-ray confirmed)		
Residents	325	4.7
Staff	19	0.9
Hospitalizations		
Residents	378	5.4
Staff	10	0.5

SOURCE: MOHLTC [Provincial Appendix D and Appendix E Database]

* New outbreaks are those in which the date of onset of the first case occurred in the current surveillance period (April 2- 8, 2006)

** Season to date includes all outbreaks in which the date of onset of the first case occurred between September 1, 2005 and April 8, 2006.

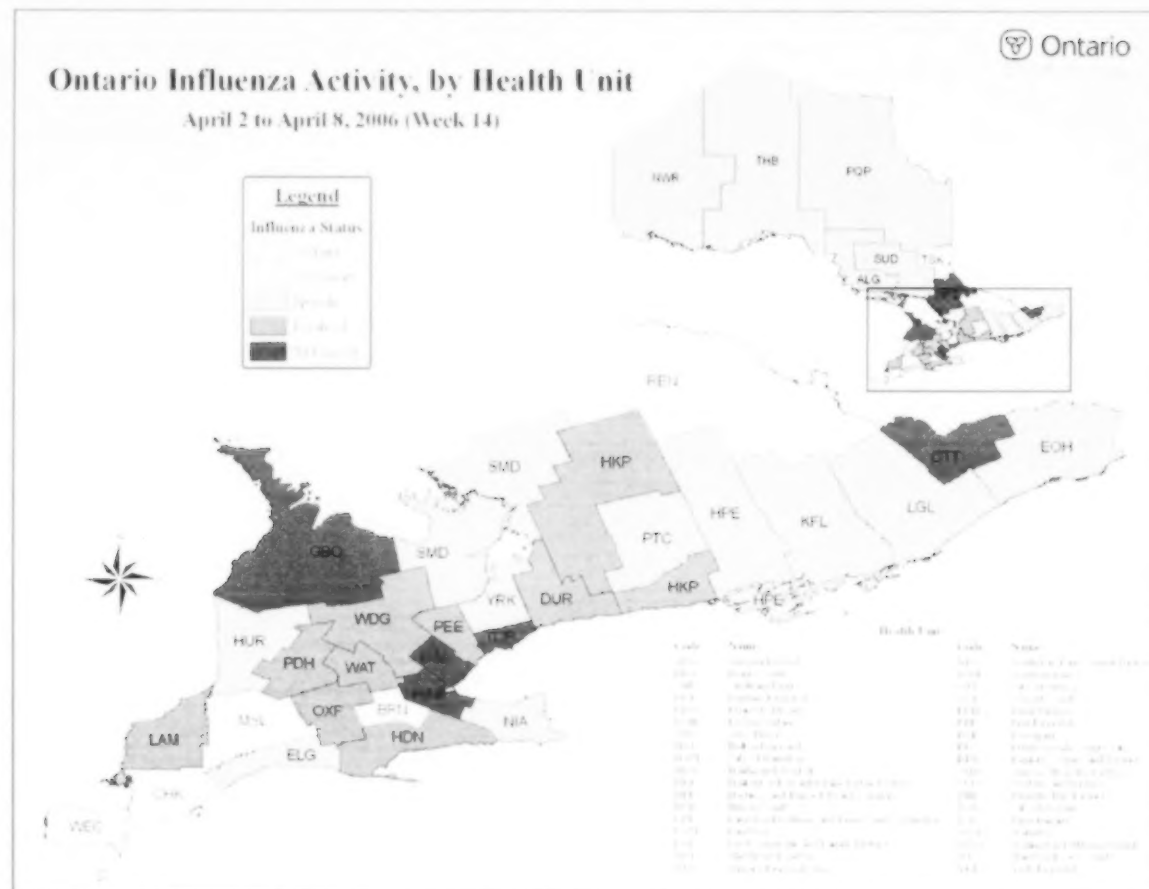
Figure 2: Influenza activity* in Ontario by health unit, Week 14 (April 2- 8) 2006.



SOURCE: MOHLTC [Provincial Influenza Activity Report (Appendix C) Database]

* Influenza activity levels, as represented on this map, are assigned by local public health units and reported to the MOHLTC by the Tuesday following the end of the surveillance week at 4 pm. Activity levels are assigned based on laboratory confirmations, ILI reports from various sources, and laboratory-confirmed institutional outbreaks. Please refer to detailed definitions for the 2005-2006 season included in the Appendix.

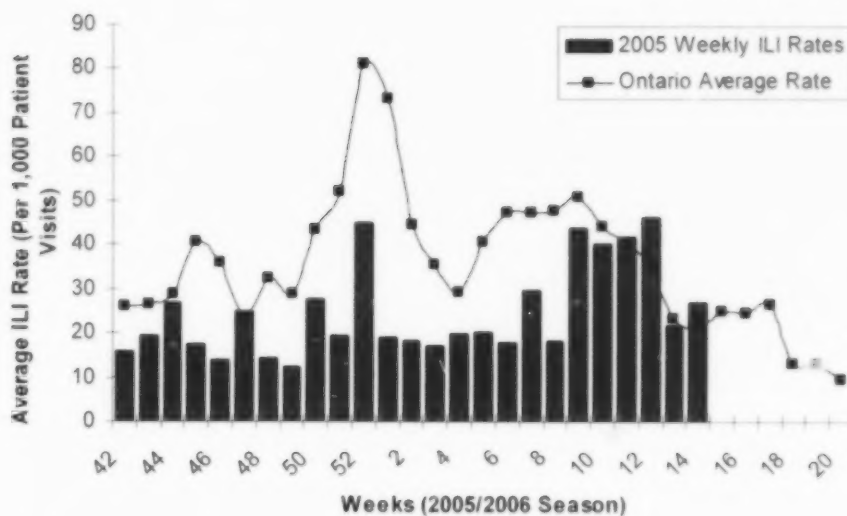
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Figure 3: Average influenza-like illness consultation rate (per 1,000 patient visits) reported by sentinel physicians* in Ontario in 2005- 2006 season, by report week, Compared to Ontario average† (1996/96 to 2004/05 seasons).



Source: Public Health Agency of Canada

* Sentinel physician information is reported to Public Health Agency of Canada.

† No data available for mean rate in previous years for weeks 21 to 39 (1996-1997 through 2002-2003 seasons). During weeks 20-39, 2002-2003/2004-2005 seasons, ILI is reported once every two weeks, on even weeks only.

Table 5: Average influenza-like illness consultation rate (per 1,000 patient visits) reported by Sentinel Physicians* in Ontario, by age group and postal code for week 14 (April 2-8), 2006.

Postal Code	0 - 4	5 - 19	20 - 64	65 +	Unknown
K2P1V3	0	0	0	0	0
K0H2N0	2	1	1	3	0
K7H2W6	0	0	1	0	0
K7L1E9	0	0	0	0	0
K0L1C0	0	0	0	0	0
L1A3W4	0	0	0	0	0
K0M1A0	0	0	0	0	0
L1B1H8	1	0	1	0	0
L4L4Y7	0	0	0	0	0
L4J7Y3	0	0	0	0	0
L4G3W3	0	0	0	0	0
M5M1B2	0	0	0	0	0
M4X1W4	0	0	0	0	0
M4E1V8	0	0	0	0	0
M8Y1W3	0	0	0	0	0
M2J2Z1	0	0	0	0	0
M3H1T1	0	0	0	0	0
M2K1E1	0	0	0	0	0
M9W6N5	1	0	0	0	0
M9W4L6	1	0	0	0	0
M8V2Z5	0	0	0	0	0
L5J2W4	0	0	0	0	0
L4Y2N8	0	0	0	0	0
L6V2A4	2	4	0	0	0
L9W1G2	0	0	0	0	0
L7R1M6	0	0	0	0	0
L9H1V1	0	0	1	0	0
L9H2G2	1	1	1	0	0
L0R1H0	0	0	3	0	0
L2E1Y3	0	0	0	0	0
L0R1B0	0	0	0	0	0
N3R7K8	0	0	0	0	0
N2G1P2	0	0	0	0	0
N2M3B5	2	1	0	0	0
N5H1K9	0	0	0	0	0
N0P2C0	0	0	0	0	0
N8X2G3	0	1	0	0	0
N0M1T0	0	0	1	0	0
N6C2R5	0	0	0	0	0
N0M1L0	0	1	0	0	0
N0G1L0	1	0	1	0	0
N0C1E0	0	0	1	0	0
P0H2H0	0	0	0	0	0
P3E5V5	0	0	0	0	0
P4N1C6	0	4	0	0	0
P7E1H5	0	0	0	0	0
P9N3V7	0	0	0	0	0
P8N2Z6	0	0	0	0	0
ILI Sum	11	13	11	3	0
ILI Consultation Rate (per 1,000 patient visits)	123.6	80.8	13.7	7.9	0.0

Source: Public Health Agency of Canada

* Sentinel physician information is reported to the Public Health Agency of Canada

Note: The small numbers of sentinel physicians reporting at the local level make the ILI rates unstable. Please interpret these data correspondingly.

FURTHER INFORMATION

1. Ontario Ministry of Health and Long-Term Care
Previous issues of the Ontario Influenza Bulletin can be accessed at:
www.health.gov.on.ca/english/providers/program/pubhealth/flu/flu_04/flubul_mn.html
2. Public Health Agency of Canada
Issues of FluWatch can be accessed at:
www.phac-aspc.gc.ca/fluwatch/
3. United States Centers for Disease Control and Prevention
www.cdc.gov/flu/

INFORMATION ABOUT AVIAN INFLUENZA

For latest information on the status of avian influenza worldwide please use the following link:

Public Health Agency of Canada
<http://www.phac-aspc.gc.ca/h5n1/index.html>

APPENDIX

Definitions for influenza activity levels:

No Data: No activity report corresponding to the surveillance week was received at the Ministry of Health and Long-Term Care Call Centre by the Tuesday (at 4 p.m.) following the end of the surveillance period.

No Activity = No ILI and no laboratory-confirmed cases* or outbreaks occurred.

Sporadic: sporadically occurring ILI **AND** laboratory-confirmed influenza* with NO outbreaks detected within the influenza surveillance region†

Localized: sporadically occurring ILI **AND** laboratory-confirmed influenza* together with outbreaks of ILI in schools and worksites or laboratory confirmed influenza in residential institutions occurring in less than 50% of the influenza surveillance region(s)

Widespread: sporadically occurring ILI **AND** laboratory-confirmed influenza* together with outbreaks of ILI in schools and worksites or laboratory-confirmed influenza in residential institutions occurring in greater than or equal to 50% of the influenza surveillance region(s)

* Confirmation of influenza within the surveillance region at any time within the prior four weeks

† Sub-regions within the province or territory as defined by the provincial/territorial epidemiologist

Influenza-Like Illness (ILI) Definitions:

A) ILI in the general population:

Acute onset of respiratory illness with fever and cough and with one or more of the following - sore throat, arthralgia, myalgia, or prostration which could be due to influenza virus. In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent.

B) ILI/Influenza outbreaks:

Schools and work sites: greater than 10% absenteeism on any day most likely due to ILI.

Residential institutions: two or more cases of ILI within a seven-day period, including at least one laboratory-confirmed case.

